

*AMENDMENTS TO THE ABSTRACT*

Replace the Abstract with:

In case of time-stationary encoding, every instruction that is part of the processor's instruction-set controls a complete set of operations that have to be executed in a single machine cycle. These operations may be processing several different data items traversing the data pipeline. Time-stationary encoding is often used in application-specific processors, since it saves the overhead of hardware necessary for delaying the control information present in the instructions, at the expense of larger code size. A disadvantage of time-stationary encoding is that it does not support conditional operations. The invention proposes to dynamically control the write back of result data to the register file of the ~~time-stationary~~time-stationary processor, using control information obtained by the program. By controlling the write back of data at run-time, conditional operations can be implemented by a ~~time-stationary~~time-stationary processor.